

V&V Reference Report

L2 ASCDS Version : 10

Observation 15147 - L2 Version 2
Chandra X-Ray Center

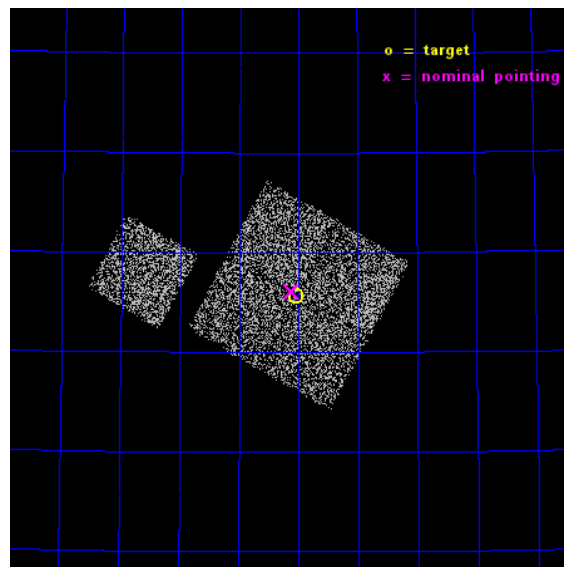
L2 Processing Date : Dec 3 2014

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1 Front

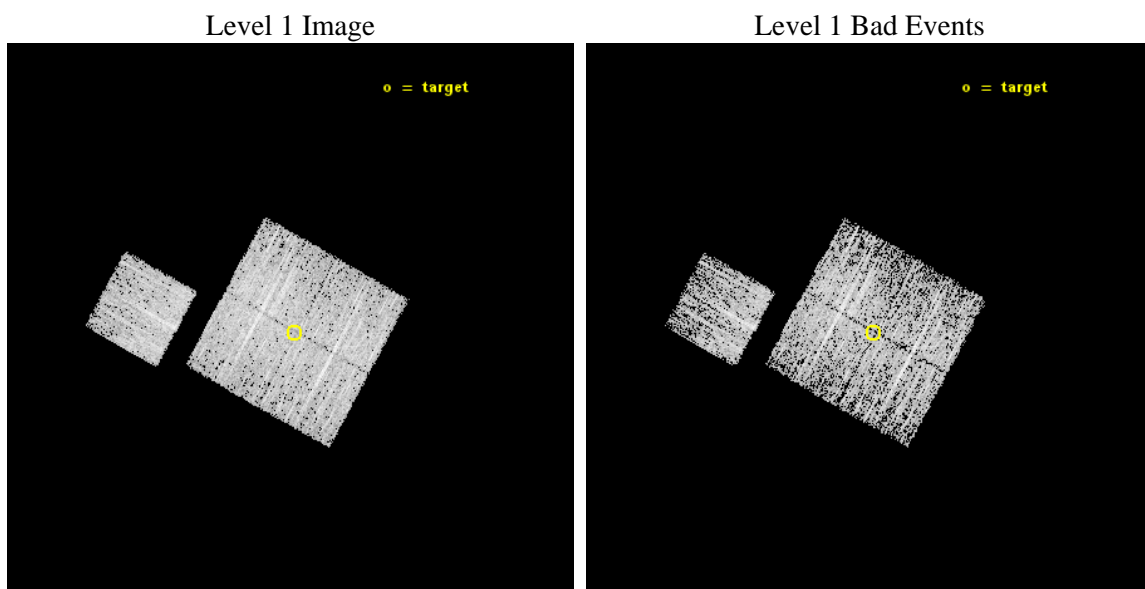
seq_num	801276	Sequence number
obs_id	15147	Observation id
title	TO THE OUTER LIMITS OF CLUSTERS WITH CHANDRA AND SUZAKU	Proposal t
observer	Dr. Eric Miller	Principal investigator
object	A665	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.0105	Observer's specified target RA [deg]
dec_targ	65.594178	Observer's specified target Dec [deg]
ra_nom	128.02985043049	Nominal RA [deg]
dec_nom	65.60183169422	Nominal Dec [deg]
roll_nom	299.05224273213	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5086.6464535594	Sum of GTIs [s]
livetime	5020.185672909	Livetime [s]
ontime0	5086.6054135561	Sum of GTIs [s]
ontime1	5086.6464535594	Sum of GTIs [s]
ontime2	5086.6874935627	Sum of GTIs [s]
ontime3	5086.728533566	Sum of GTIs [s]
ontime6	5086.5643735528	Sum of GTIs [s]
l2events	12120	Number of level 2 events



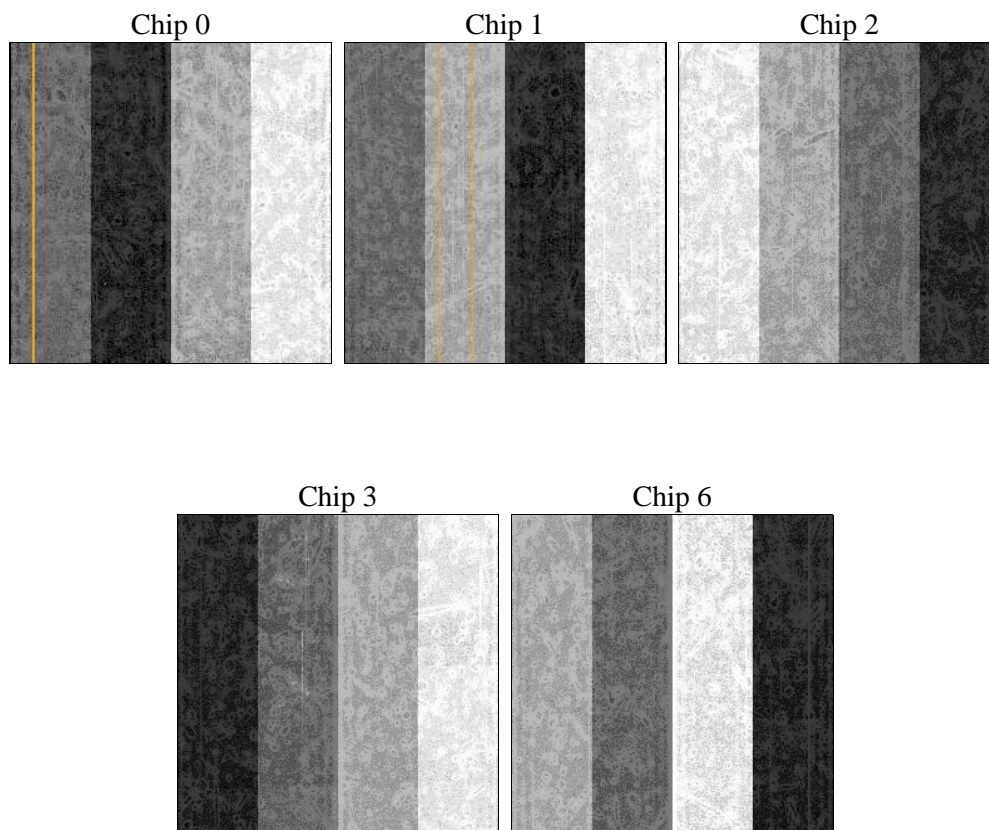
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	5086.6464535594	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	5086.6054135561	Sum of GTIs [s]
date	2014-12-03T16:47:13	Date and time of file creation	ontime1	5086.6464535594	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5086.6874935627	Sum of GTIs [s]
			ontime3	5086.728533566	Sum of GTIs [s]
			ontime6	5086.5643735528	Sum of GTIs [s]
			l1events	113731	Number of level 1 events

2.1.4 Events

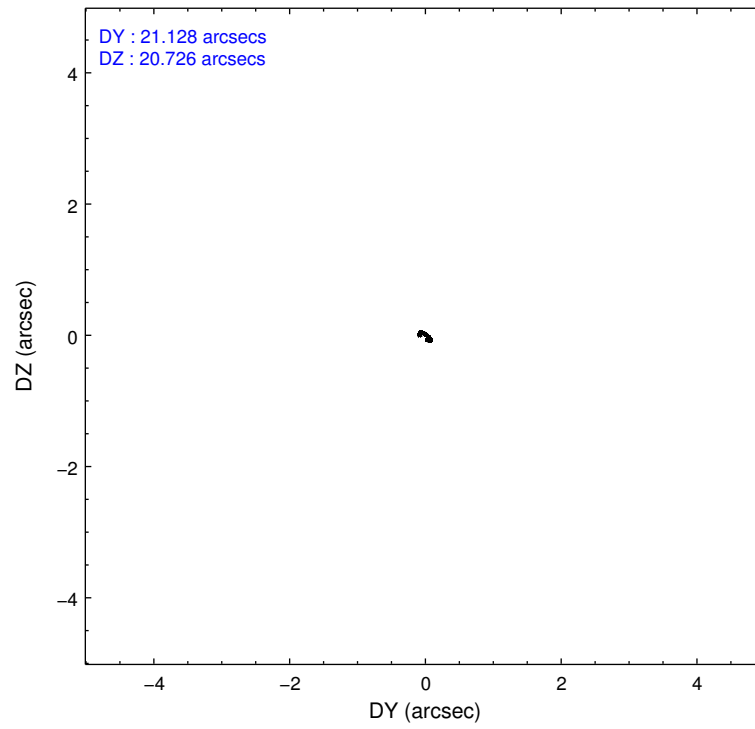
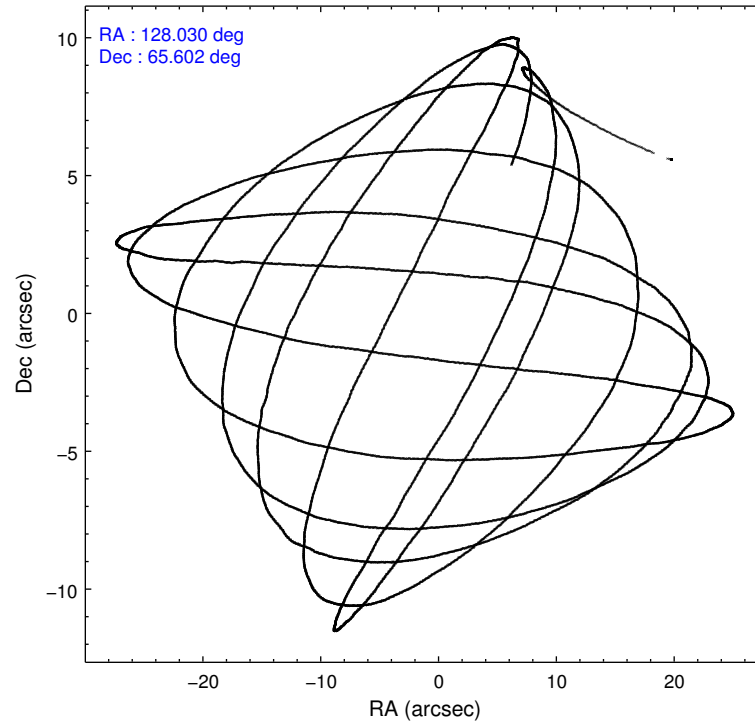
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	21917	22600	22799	23587	22828
rejected events	19219	19512	19947	20832	19918
rejected %	87%	86%	87%	88%	87%

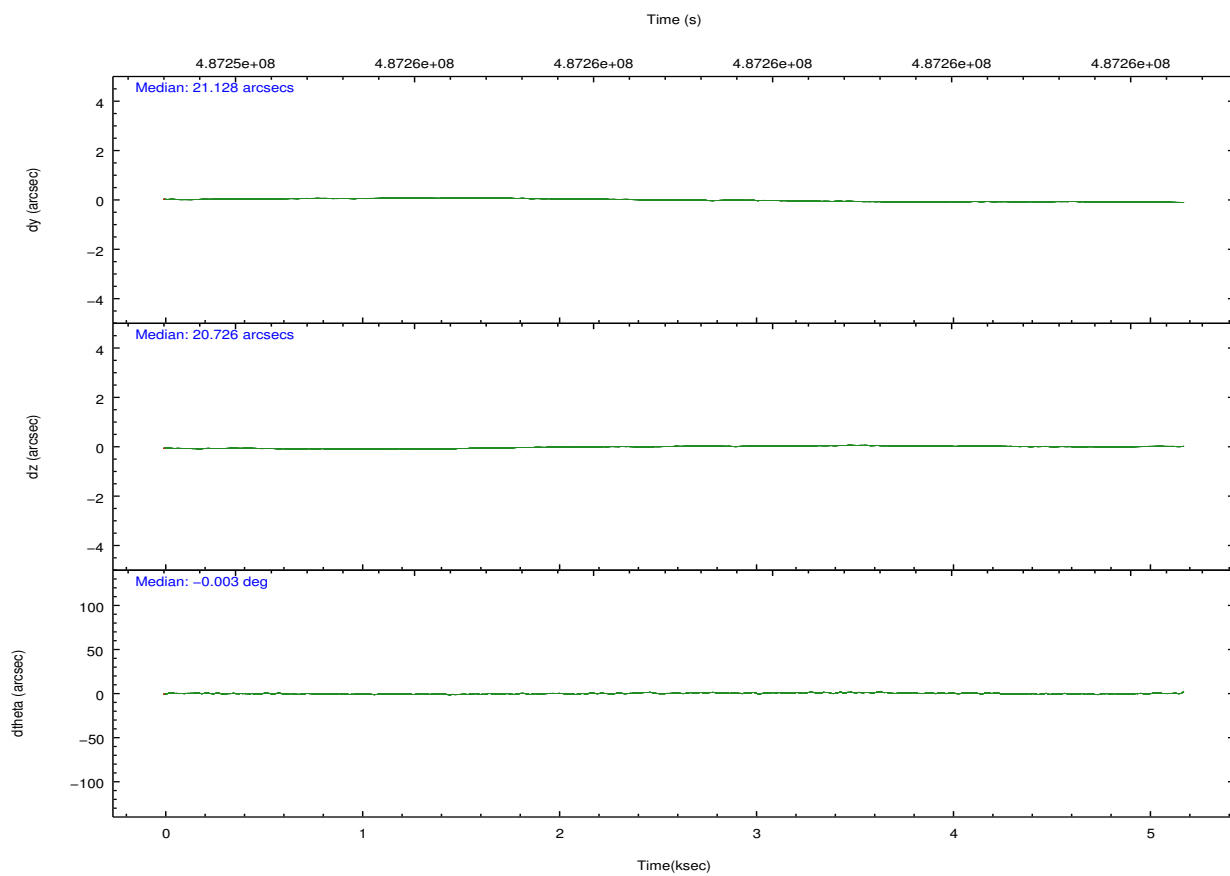
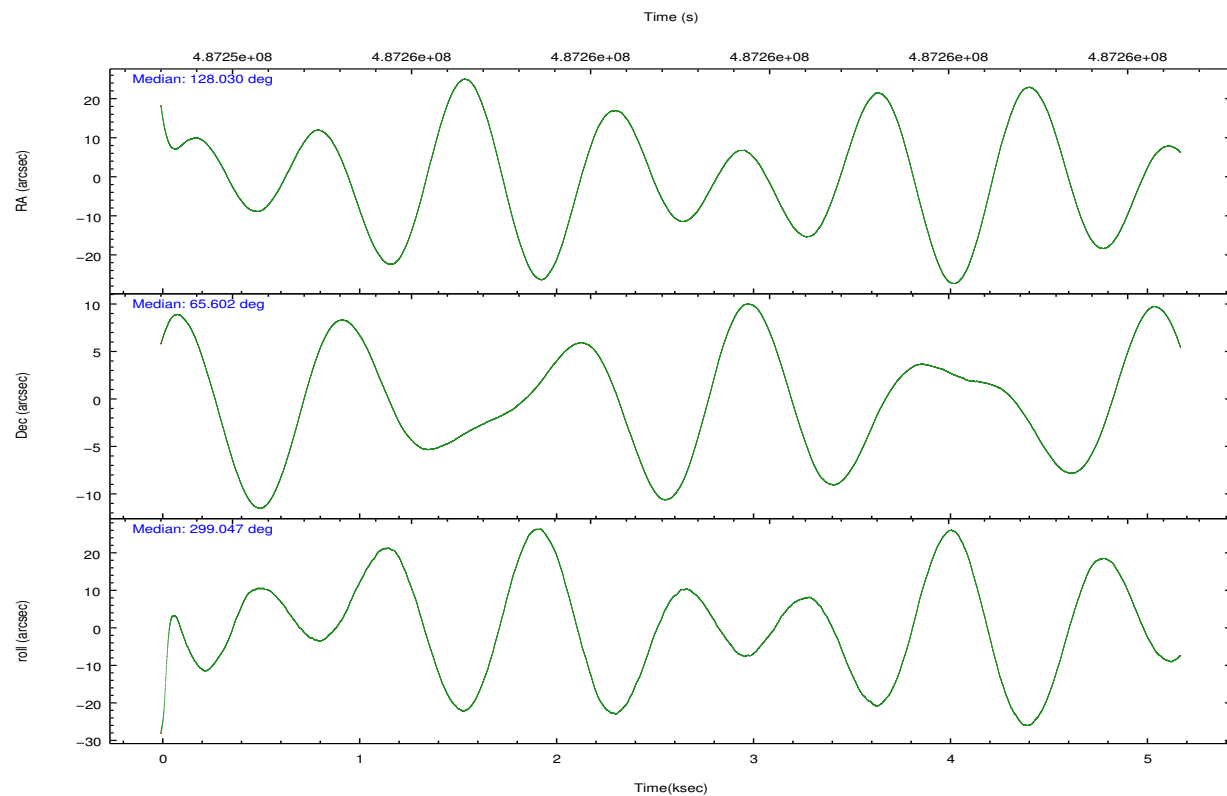
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	890	1090	1047	1028	1022
	4%	4%	4%	4%	4%
grade 1 events	11	6	8	16	10
	0%	0%	0%	0%	0%
grade 2 events	706	737	692	612	614
	3%	3%	3%	2%	2%
grade 3 events	287	300	290	293	327
	1%	1%	1%	1%	1%
grade 4 events	241	302	301	293	300
	1%	1%	1%	1%	1%
grade 5 events	1071	1162	967	1220	1206
	4%	5%	4%	5%	5%
grade 6 events	575	662	524	530	652
	2%	2%	2%	2%	2%
grade 7 events	18136	18341	18970	19595	18697
	82%	81%	83%	83%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	127.972450	128.0298504304861	CCD I2 on	Y	Y
[deg] Pointing Dec	65.615760	65.60183169422004	CCD I3 on	Y	Y
[deg] Pointing Roll	298.895913	299.0522427321303	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	487254024.184000	487252955.9039	CCD S5 on	N	N
Observation start date	2013-06-10T12:19:17	2013-06-10T12:02:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	487259024.184000	487259879.26678	On-chip summing requested	N	N
Observation end date	2013-06-10T13:42:37	2013-06-10T13:57:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



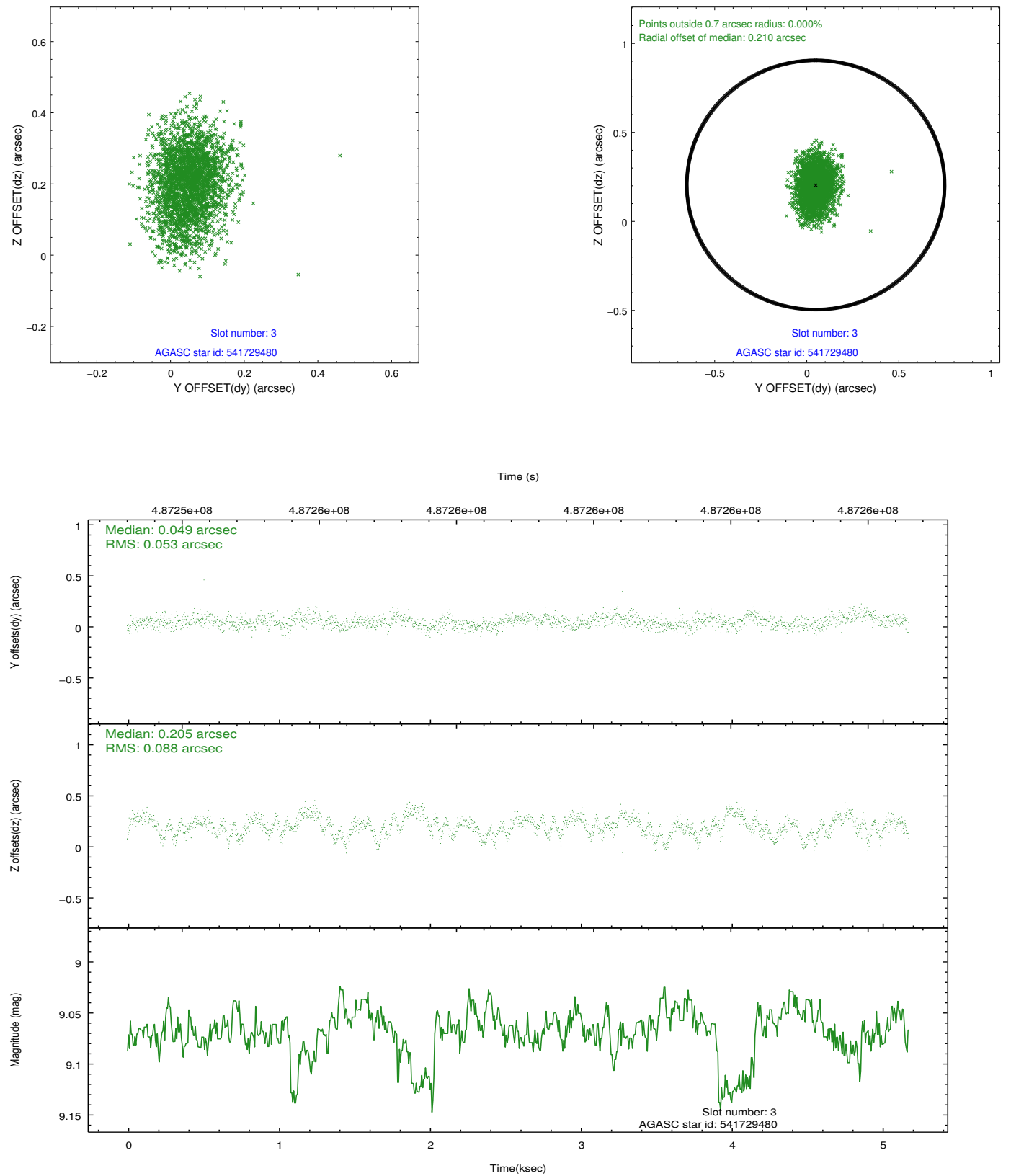


Slot Statistics

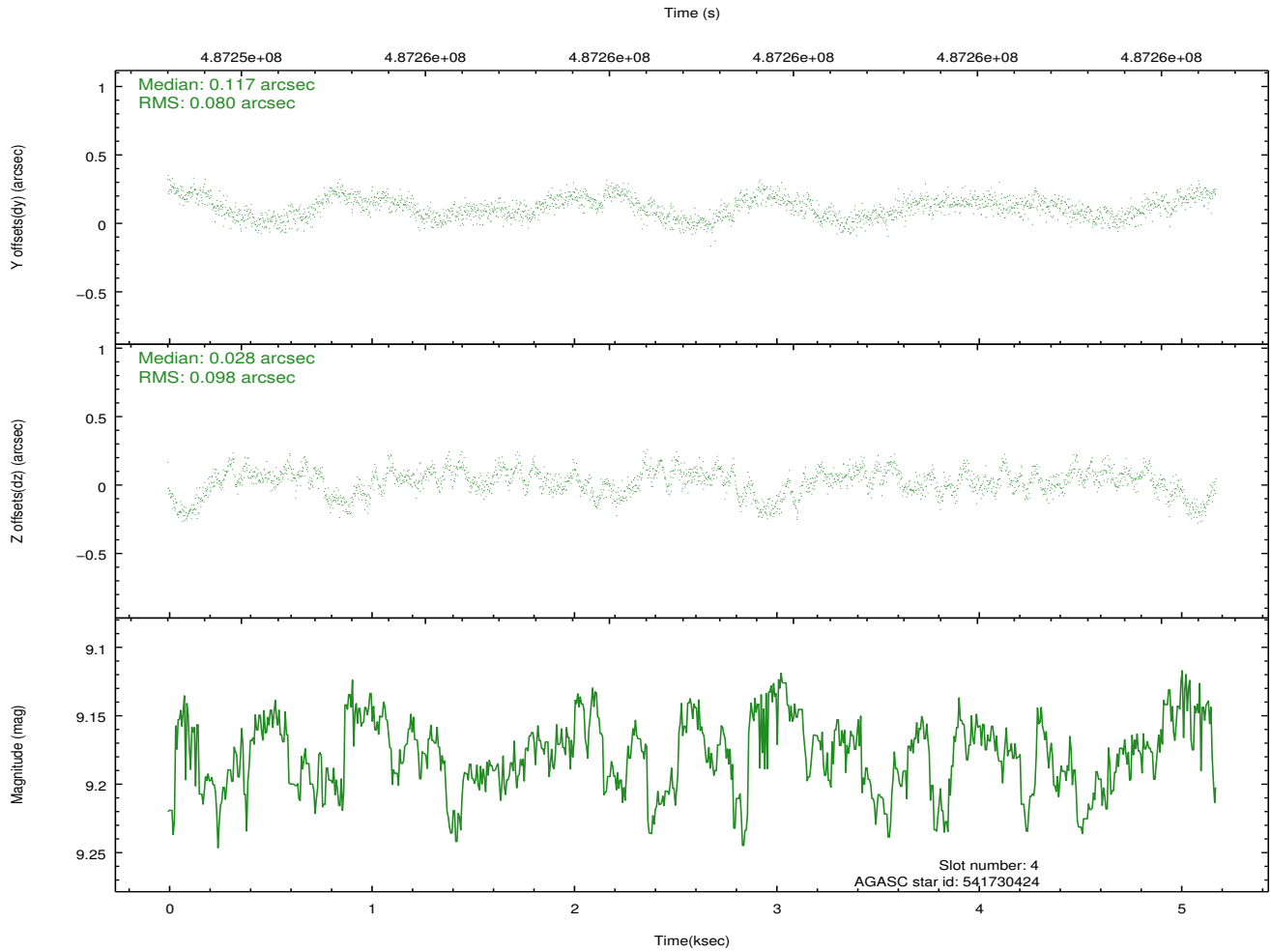
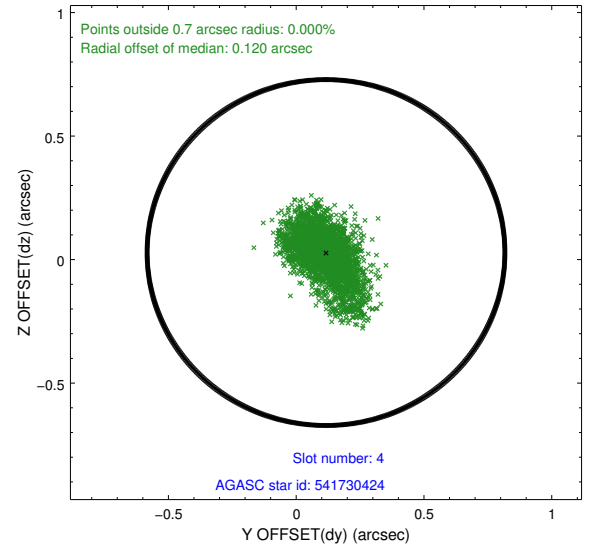
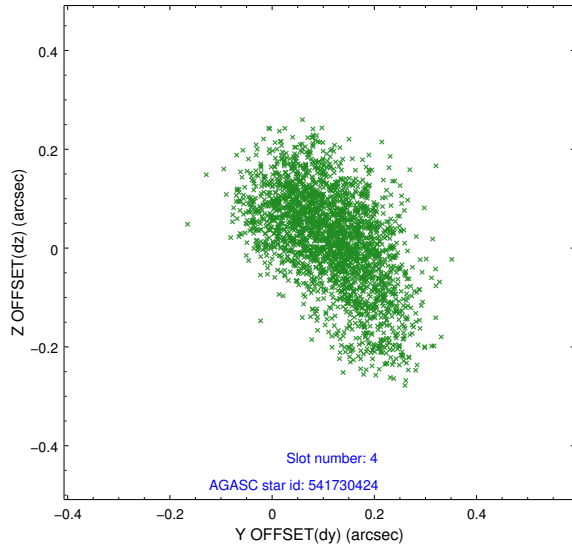
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	1264	0.054	-0.026	0.006	0.010	0.000000	0.000000	918.23	-844.47
1	FID		ACIS-I-5	7.04	1264	-0.246	0.047	0.006	0.010	0.000000	0.000000	-1829.56	1052.47
2	FID		ACIS-I-6	7.05	1264	0.101	0.050	0.006	0.011	0.000000	0.000000	382.51	1698.32
3	GUIDE	used	541729480	9.07	2524	0.049	0.205	0.106	0.183	126.985305	65.880968	-1546.88	-804.70
4	GUIDE	used	541730424	9.18	2525	0.117	0.028	0.132	0.232	127.891536	65.345004	794.71	-577.87
5	GUIDE	used	541730880	8.07	2526	0.009	0.059	0.089	0.140	127.501712	65.260390	776.87	-1237.84
6	GUIDE	used	541736200	9.63	2519	0.019	-0.118	0.113	0.190	129.974405	65.392002	2114.26	2259.99
7	GUIDE	used	541728304	9.42	2523	-0.183	-0.165	0.129	0.203	129.452175	65.893478	154.58	2400.50

2.4 Star Slots

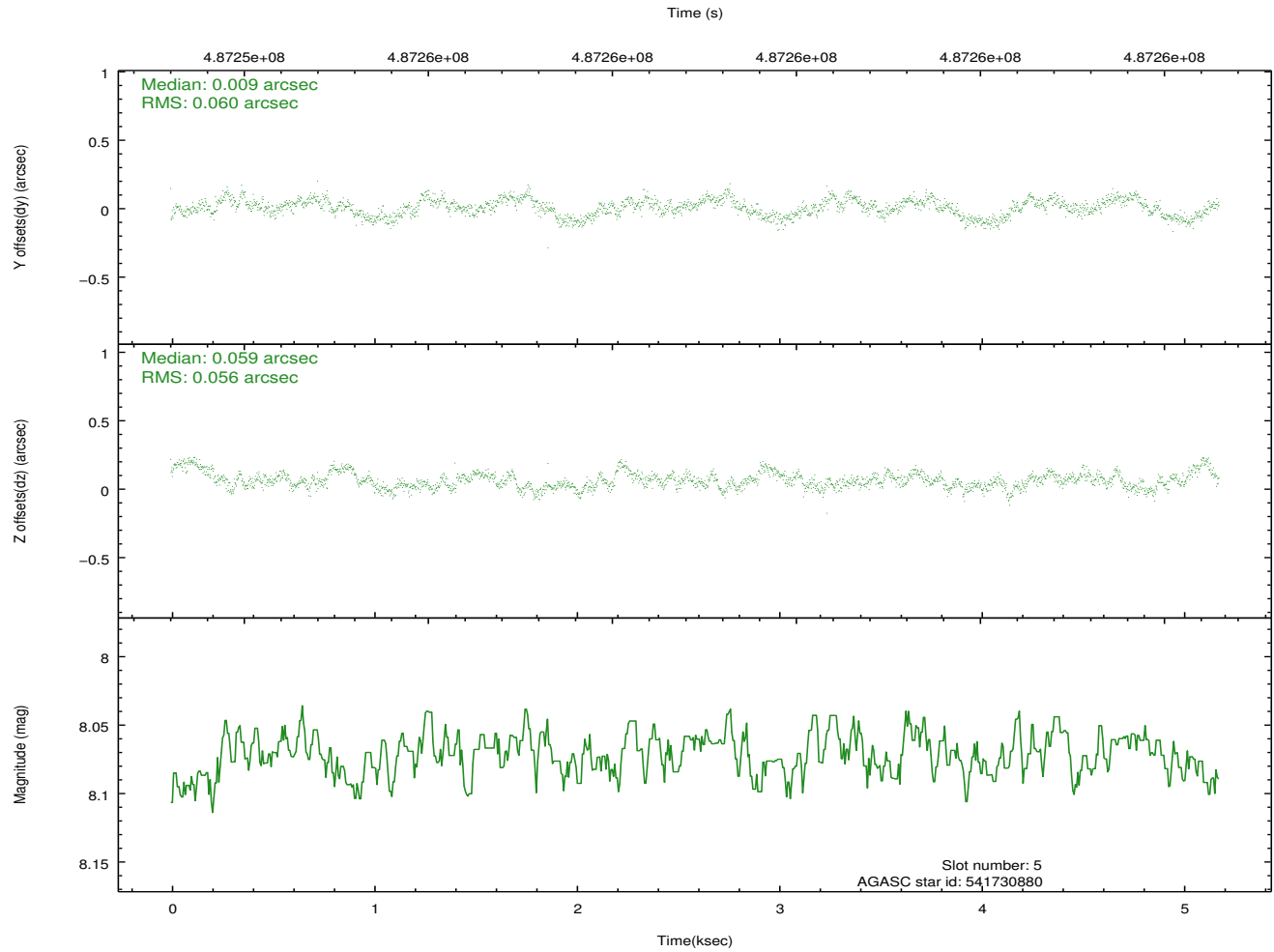
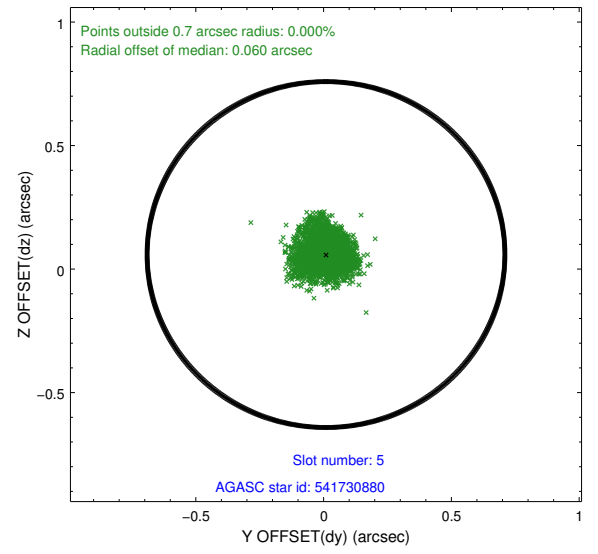
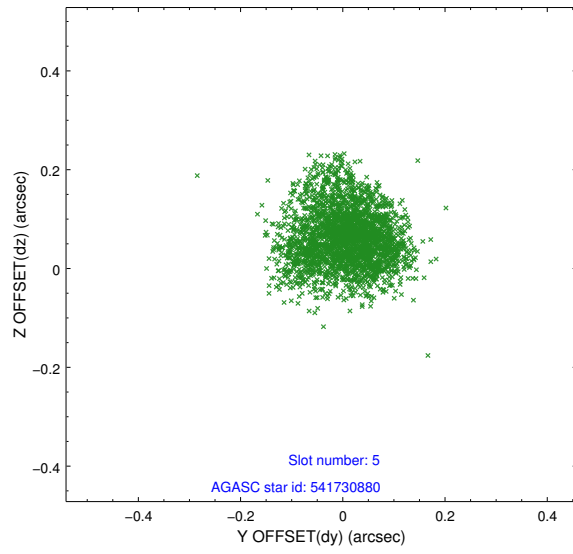
2.4.1 Slot 3



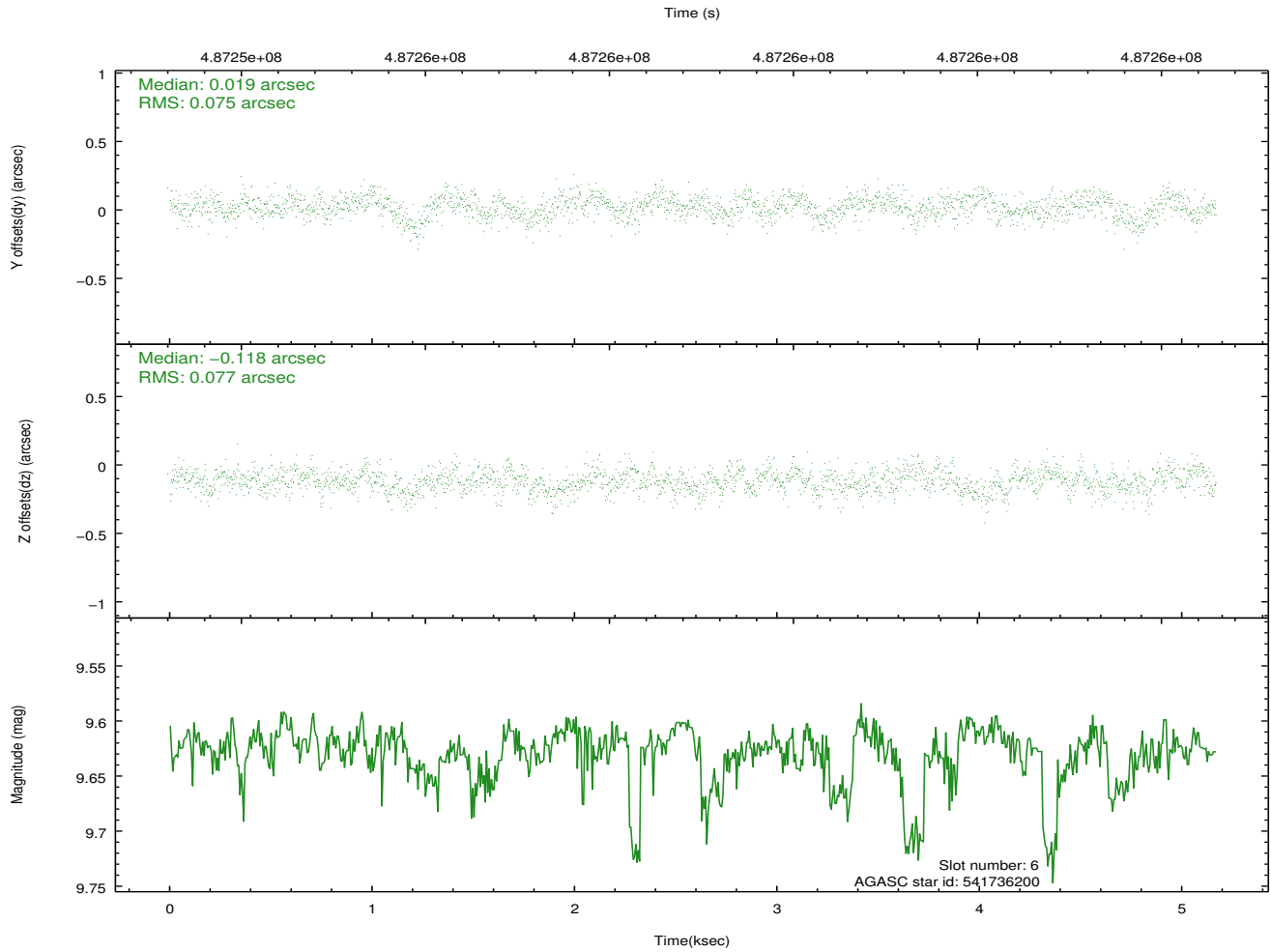
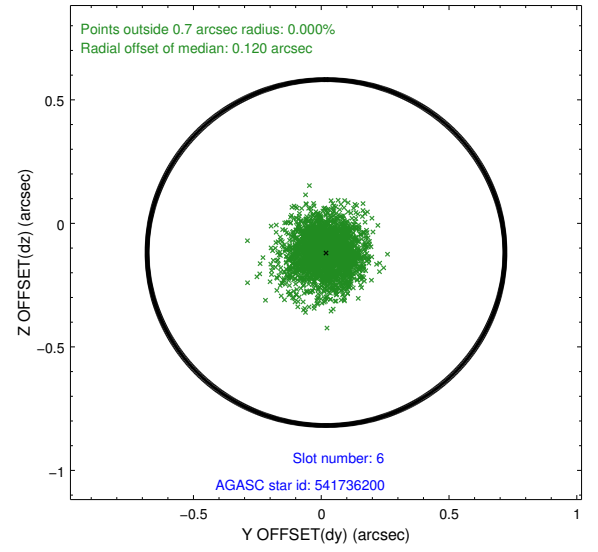
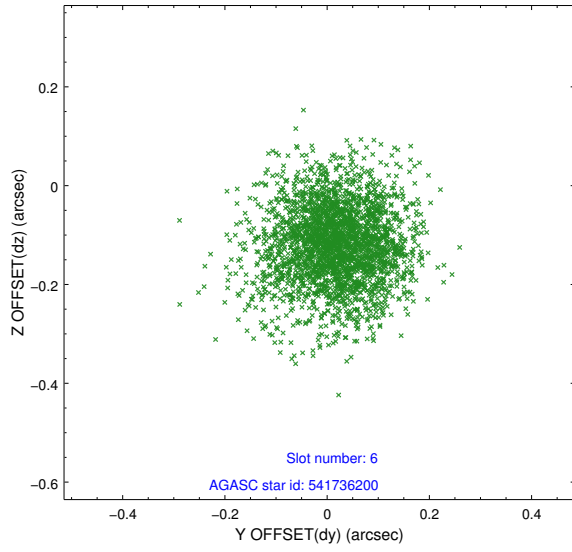
2.4.2 Slot 4



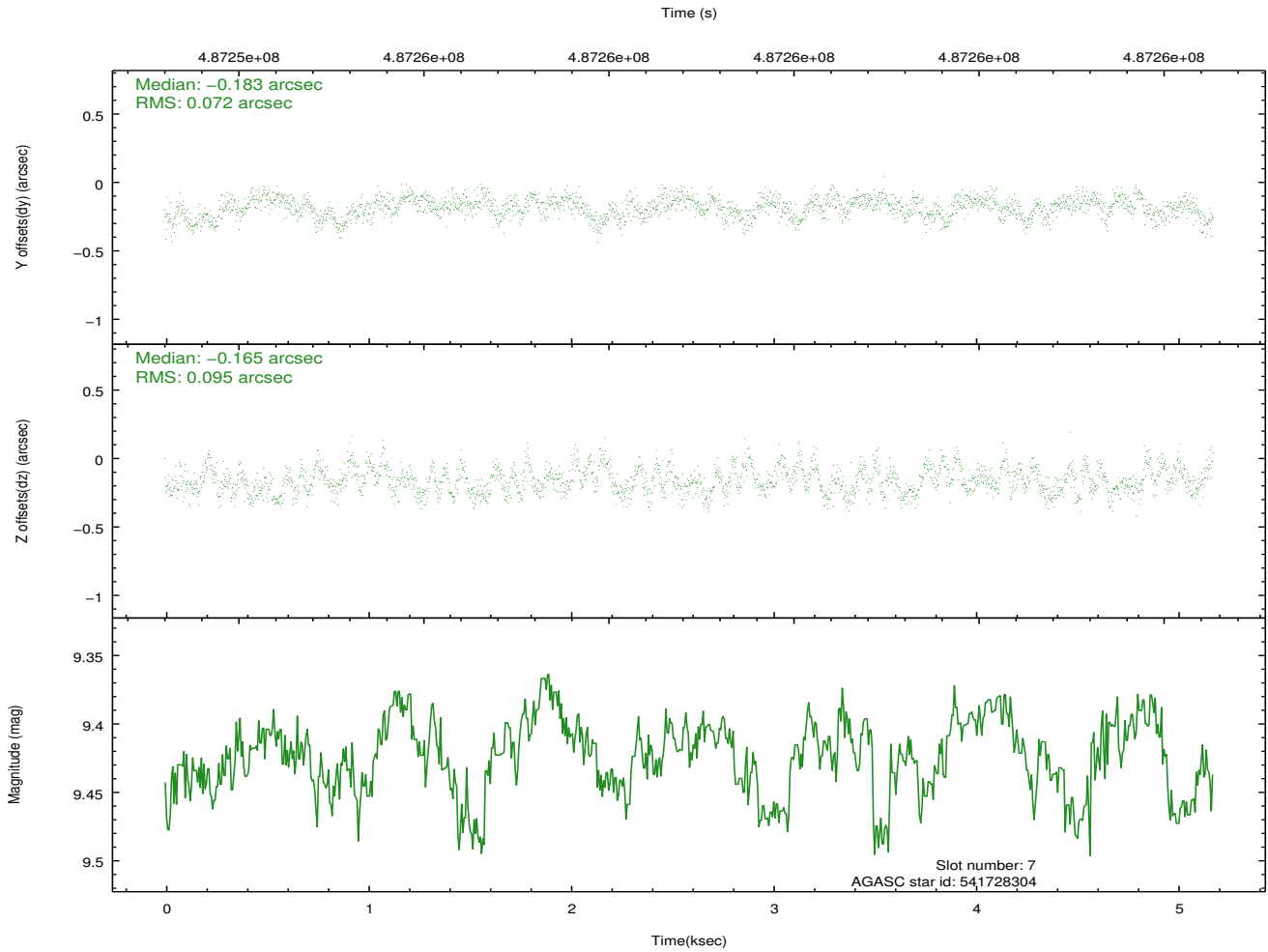
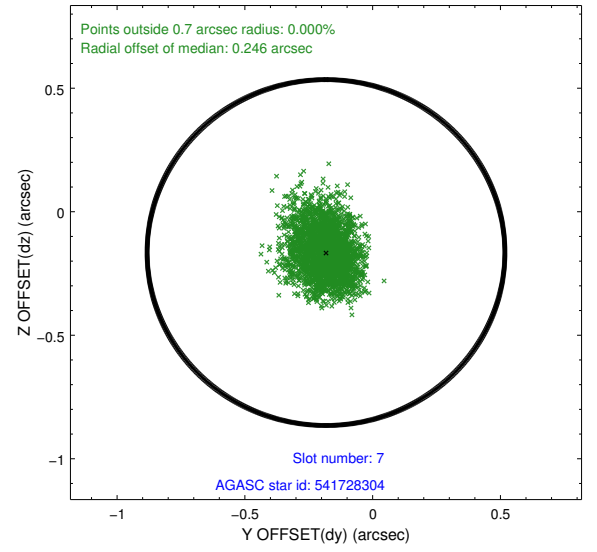
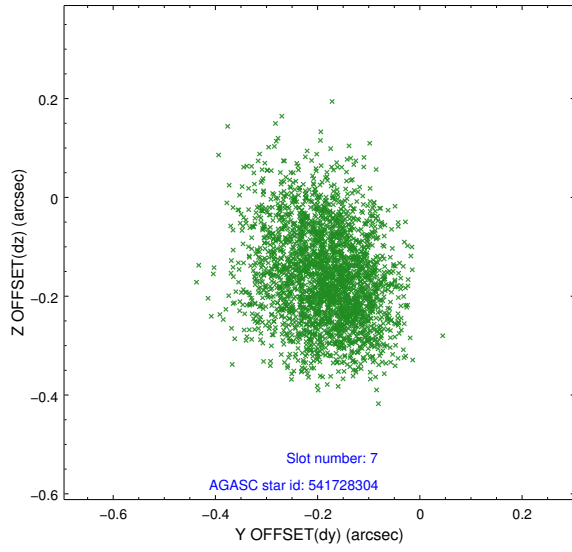
2.4.3 Slot 5



2.4.4 Slot 6

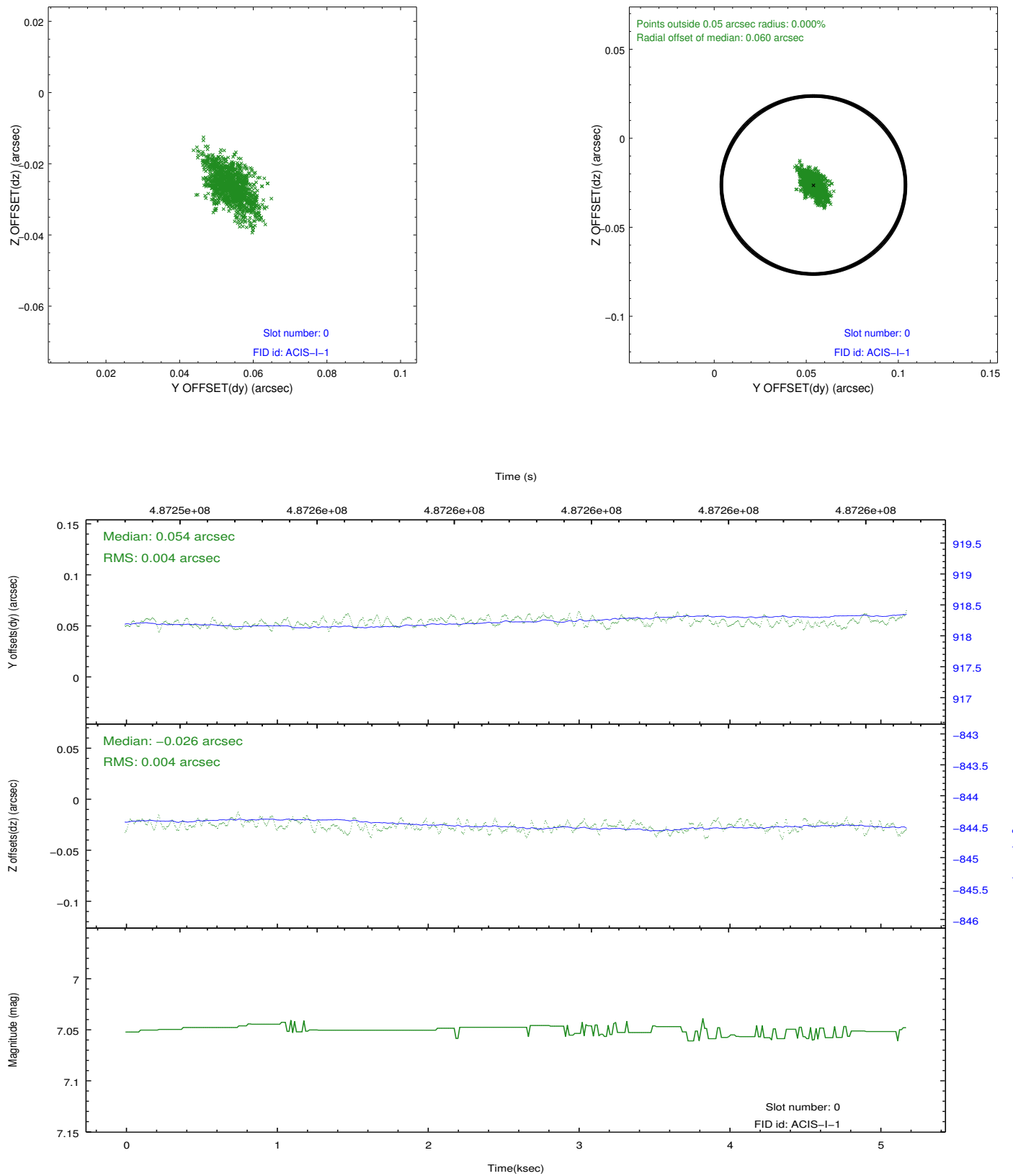


2.4.5 Slot 7

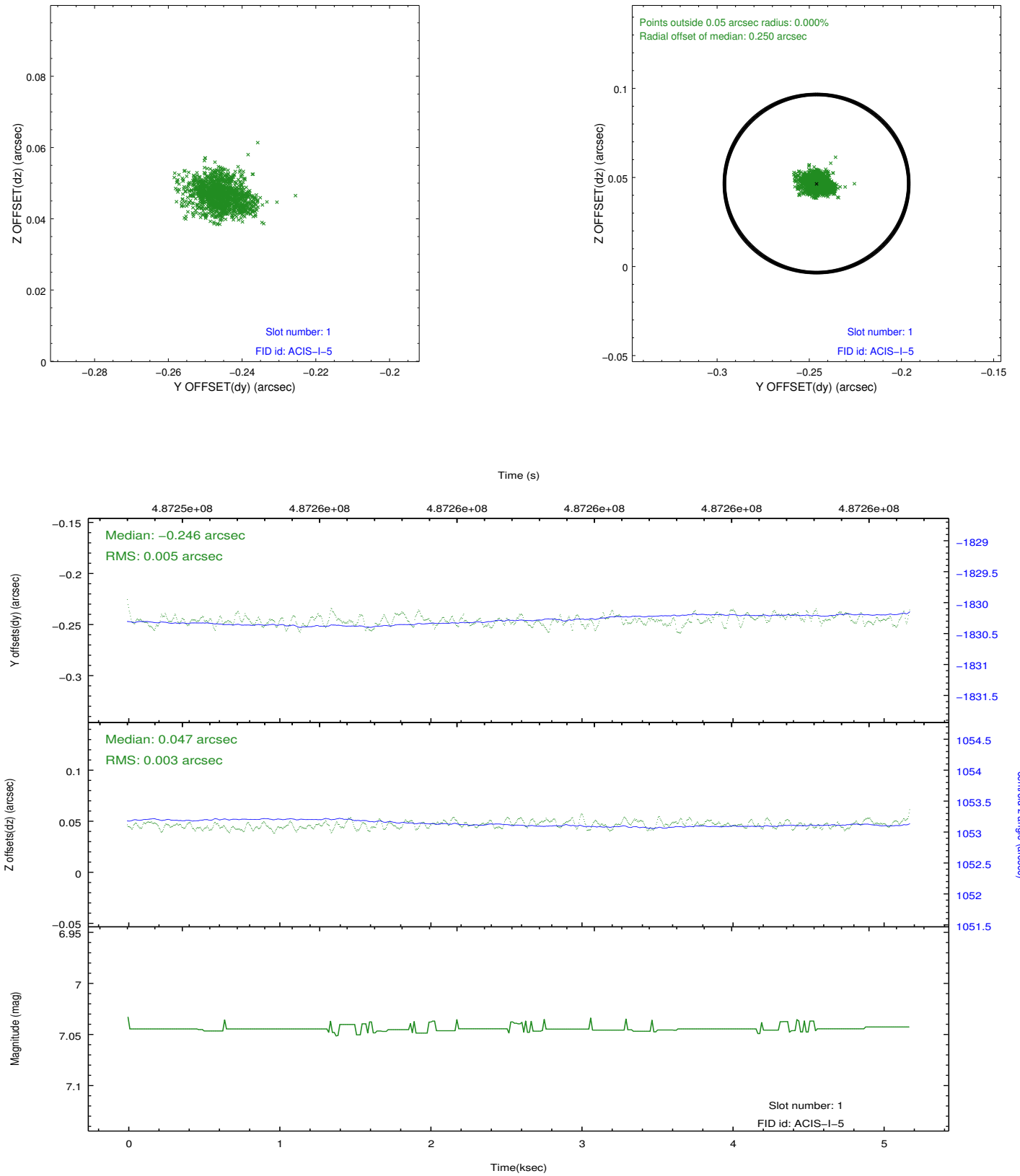


2.5 FID Slots

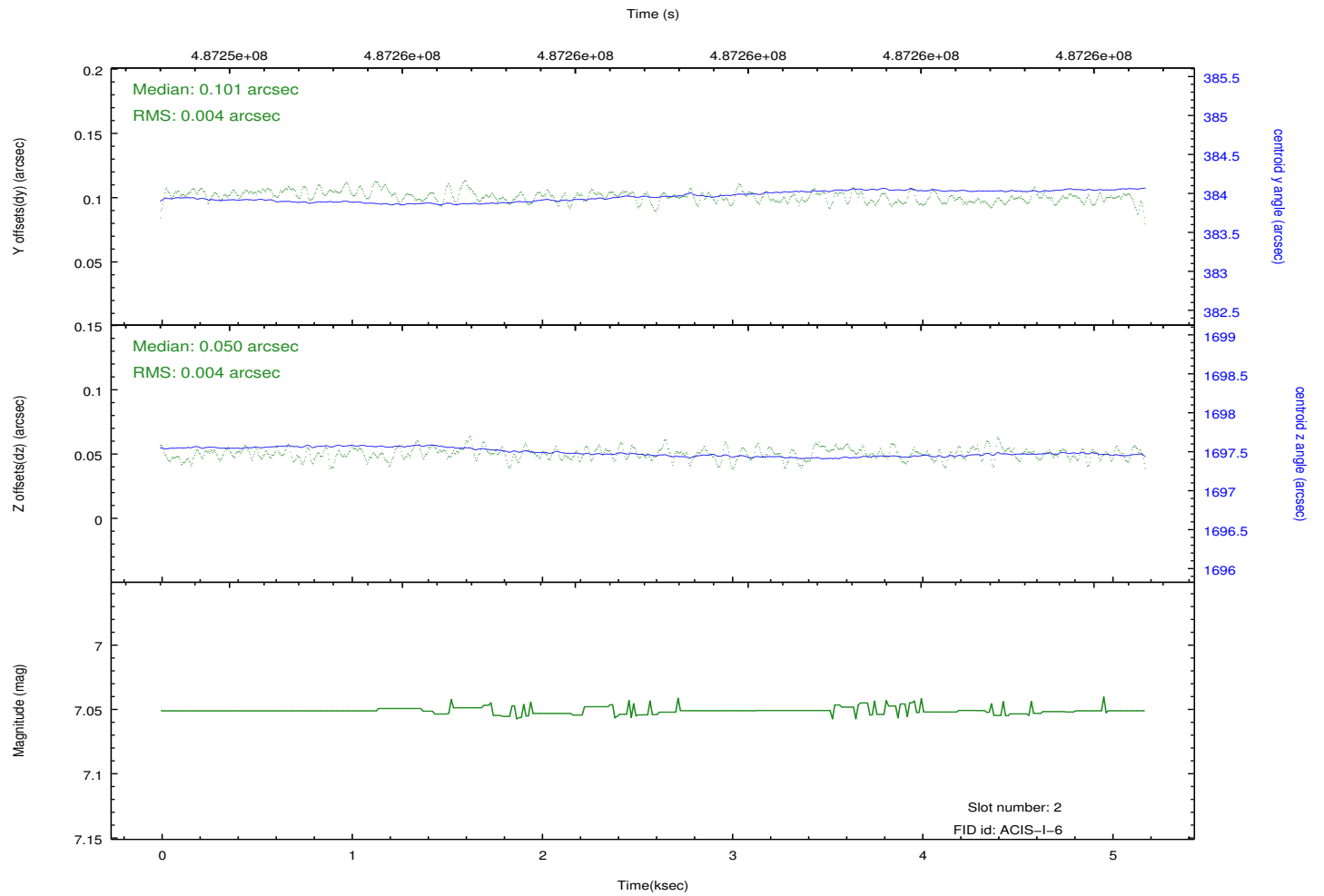
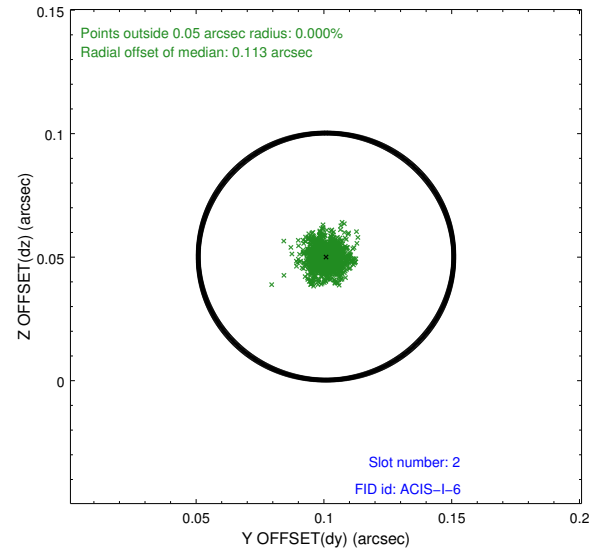
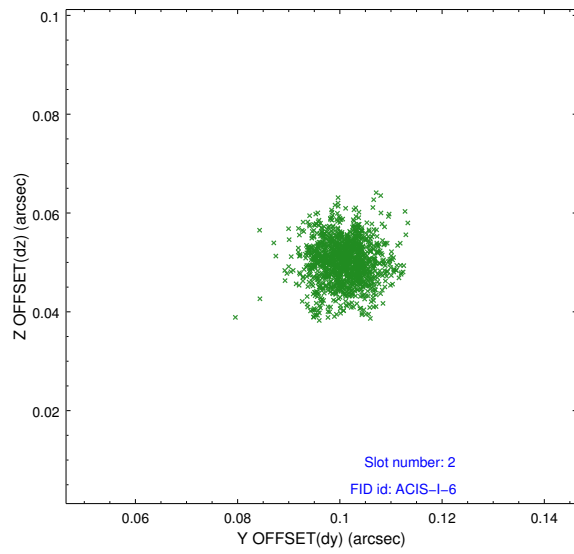
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0866464535594

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.